AVIAN INFLUENZA GLOSSARY

Definitions and explanations of commonly used words and terms related to avian flu. *Last updated April 25, 2006*

1918 Spanish Flu Pandemic

The 1918 Spanish Flu Pandemic was an unusually severe and deadly strain of avian influenza that killed some 25 million to 50 million people worldwide in 1918 and 1919. It is thought to have been one of the most deadly pandemics in human history. It was caused by the H1N1 type of flu virus

Annual Flu

Annual flu, or "seasonal flu," is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness, and at times can lead to death. Annual flu is an outbreak of this viral respiratory illness that occurs almost every year.

Antibiotics

Antibiotics are medicines designed to kill bacteria and to treat and prevent bacterial diseases and infections. Antibiotics are not used to prevent or treat influenza (which is a virus, not a bacteria) but may be used to treat bacterial infections, such as pneumonia, that may occur as complications of influenza infection.

Antivirals

Antivirals are drugs that kill or prevent the growth of viruses, including influenza. Tamiflu is an example of an antiviral drug used to treat influenza.

Avian Flu

Avian flu, or "bird flu," is an infection caused by avian influenza (or "bird flu") viruses. These flu viruses occur naturally among birds. Wild birds worldwide commonly carry the viruses in their intestines or respiratory tracts but usually do not get sick from them. However, bird flu can be contagious among birds and can make some domesticated birds including chickens, ducks, and turkeys – very sick and kill them. The risk to humans of avian flu is generally low to because the viruses occur mainly among birds and do not easily infect humans. However, during an outbreak of avian flu among poultry (including domesticated chicken, ducks, turkeys) there is a possible risk to people who have contact with infected birds or surfaces that have been contaminated with excretions from infected birds that carry the virus.

Bird Flu

See "avian flu."

Culling

Culling involves the destruction of birds – both wild and domestic – that have been exposed to or infected by the avian flu virus. Culling operations generally involve the euthanasia of affected birds, carcass disposal to avoid further contamination or infection, and cleaning and disinfection of areas affected by avian influenza.

Epidemic

An epidemic is a disease outbreak in which some or many people in a community or region become infected with the same disease. Epidemic and outbreak are often used synonymously.

FluMist

FluMist is a nasal-spray flu vaccine. The vaccine offers similar protection from the flu as the traditional "flu shot." It is different from the other licensed influenza vaccine (also called the "flu shot") because it contains weakened live influenza viruses instead of "killed" viruses and is administered by nasal spray instead of injection. You cannot get the flu from FluMist.

H5N1

The H5N1 virus is one of 16 different known subtypes of avian flu (bird flu) viruses. Some H5N1 viruses are highly pathogenic, meaning they can cause severe disease and death in humans. H5N1 viruses have been found in birds around the world. As the spread of H5N1 infection among birds increases, so, too, does the opportunity for H5N1 to be transmitted directly from birds to humans. Recently, human H5N1 infection has occurred in Southeast Asia during large H5N1 outbreaks among poultry, causing great concern among health officials. Currently, the H5N1 virus has not resulted in human to human spread.

High Pathogenicity Avian Influenza

There are many types of naturally occurring avian influenza viruses in wild birds and poultry. When we talk about bird flu or avian influenza, we are generally referring to a cluster of high pathogenicity H5N1 strains of the virus. These high pathogenicity avian influenza strains, also known as "high path" or HPAI, are frequently fatal to birds and easily transmissible between susceptible species. The strain that is currently of concern in Southeast Asia and Europe is the H5N1 "high path" virus.

Low Pathogenicity Avian Influenza

There are many types of naturally occurring avian influenza viruses in wild birds and poultry. Most strains of avian influenza are classified as low pathogenicity avian influenza, also known as "low path" or LPAI, and cause few clinical signs in infected birds. "Low path" avian influenza generally does not pose a significant health threat to humans. However, "low path" avian influenza is monitored because two strains of LPAI – the H5 and H7 strains – can mutate into highly pathogenic forms.

Mutation

Mutation occurs when a gene is altered from its natural state. This change may cause disease, change diseases in a way that make them more harmful, or may be a harmless, normal change. Specific mutations and evolution in influenza viruses cannot be predicted, making it difficult if not impossible to know if or when a virus such as H5N1 might acquire the properties needed to spread easily among humans.

N95 Mask

The N95 mask, or N95 respirator, is a lightweight, nose-and-mouth respirator that can provide some level of protection for the wearer from viruses, including avian flu. The N95 designation is a government efficiency rating that means the mask blocks about 95 percent of particles that are 0.3 microns in size or larger. The Centers For Disease Control & Prevention (CDC) has recommended the use of N95 masks for protection against the avian flu virus.

Outbreak

An outbreak is the confirmed presence of disease in at least one individual in a defined location and during a specified period of time. Outbreak is often used synonymously with epidemic.

Pandemic

A pandemic is an epidemic that spreads throughout the world.

Pandemic Influenza

Pandemic influenza occurs when a new strain of influenza virus emerges, spreading around the world and infecting many people at once. An influenza virus capable of causing a pandemic is one that people have no natural immunity to, can easily spread from person to person, and is capable of causing severe disease.

Reassortment

Reassortment occurs when the genes from two different and distinct influenza strains rearrange and recombine to produce a new, novel strain of influenza.

Seasonal Flu

See "annual flu."

Stockpile

A stockpile is a reserve supply of (in the case of influenza and avian flu) medicine, supplies and equipment necessary to manage an outbreak. The stockpile is accumulated over time and is set aside for use in response to an acute outbreak situation.

Surveillance

Disease surveillance is the regular collection, monitoring and analysis of information and data relevant for control and prevention of disease. The data may be used to define baseline levels of disease. By knowing the baseline, one may then identify unusual occurrences of disease. The purposes of infectious disease surveillance are to interrupt transmission of disease to susceptible persons and to reduce infection and death through timely reporting, identification and investigation of outbreaks, and interpretation of investigative data and dissemination of findings.

Tamiflu

Tamiflu is an antiviral medicine to treat infection caused by influenza virus. Tamiflu does not prevent you from getting the flu. These medications attack the influenza virus and prevent it from spreading inside your body. Tamiflu is used to treat seasonal or annual flu viruses. Studies suggest that Tamiflu could work in preventing and treating avian flu infection in humans.

Trivalent Influenza Vaccine

Trivalent influenza vaccine is a vaccine against annual or seasonal influenza that contains three inactivated (or "killed") flu viruses that protect against three different strains of influenza virus. The effectiveness of the trivalent vaccine depends upon the "match" between strains of influenza that are circulating and the viruses in the vaccine.

Vaccine

A vaccine is a medication intended to prevent infection. Trivalent influenza vaccine and FluMist are examples of vaccines used to prevent infection by the seasonal influenza virus.